The Arbitration Review of the Americas 2022

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The Arbitration Review of the Americas 2022

A Global Arbitration Review Special Report

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Country chapters

Welcome to *The Arbitration Review of the Americas 2022*, one of *Global Arbitration Review*'s annual, yearbook-style reports. For the uninitiated, *Global Arbitration Review* is the online home for international arbitration specialists everywhere, telling them all they need to know – about everything that matters.

Throughout the year, we deliver pitch-perfect daily news, surveys and features, organise the liveliest events (under our GAR Live and GAR Connect banners ("Connect" when it is online)) and provide our readers with innovative tools and know-how products.

In addition, assisted by external contributors, we curate a series of regional reviews – online and in print – that go deeper into local developments than the exigencies of journalism allow. *The Arbitration Review of the Americas*, which you are reading, is part of that series.

It contains insight and thought leadership inspired by the recent past from 43 pre-eminent practitioners. Across 19 articles and 123 pages, they provide an invaluable retrospective on the year just gone. All contributors are vetted for their standing and knowledge before being invited to take part.

Together, their articles capture and interpret the most substantial recent international arbitration events across the region, supported by footnotes and relevant statistics. Elsewhere they provide valuable background so that you can get up to speed quickly on the local arbitration infrastructure or the essentials of a particular country as a seat.

This edition covers Argentina, Bolivia, Canada, Ecuador, Mexico, Panama, Peru and the United States; and has eleven overviews, including two on arbitrability (one focused on Brazil in the context of allegations of corruption, the other on the relationship with competence-competence across the region). There's also a lucid guide to the interpretation of "concurrent delay" around the region, using five scenarios.

Other nuggets this reader has mentally noted for future reference include:

- helpful statistics from Brazil's CAM-CCBC, showing just how often public entities form one side of an arbitration;
- an exegesis on the questions that US courts must still grapple with when it comes to enforcing intra-EU investor-state awards;
- a similarly helpful summary of recent Canadian court decisions;
- another on Mexican court decisions that showed a rather mixed year; and
- the discovery that the AmCham in Peru as of July 2021 now engages in ICC-style scrutiny of awards.

Plus much, much more.

We hope you enjoy the review. If you have any suggestions for future editions, or want to take part in this annual project, my colleagues and I would love to hear from you. Please write to insight@globalarbitrationreview.com.

David Samuels
Publisher
July 2021

Renewable Energy Disputes in the Americas: Potential Future Developments

Seabron Adamson
Charles River Associates

In summary

Renewable energy is one of the fastest growing components of the energy economy, in Latin America and worldwide, absorbing billions of dollars of cross-border investment every year. The complex commercial, regulatory and financial aspects of utility-scale wind and solar projects create substantial scope for disputes between investors, off-takers, governments and other parties. While past renewable disputes in international arbitration have largely centred on changes in government subsidy regimes, a new generation of disputes, such as those widely anticipated in Mexico, may focus on changes in detailed power market and transmission rules. As the number of renewables projects continues to grow, the number of 'conventional' capital project disputes, including financing, construction and commissioning delays, and project performance problems will also likely rise.

Discussion points

- Renewable energy in the Americas
- Sources of dispute in the renewable power sector
- Scope for future renewable disputes in Latin America

Referenced in this article

- International Energy Agency
- International Renewable Energy Agency
- Paris Agreement

Introduction

The renewable energy sector remains one of the fastest growing components of the global economy. The impact of the covid-19 pandemic, while significant in 2020, appears likely to be short-lived. The International Energy Agency predicts a sharp rebound in new renewable power capacity in 2021, with photovoltaic (PV) solar facilities and wind farms making up over 85 per cent of new capacity additions in the sector.[1]

Across the broader renewable energy sector – which includes not only renewable power generation, such as wind and solar, but also biofuels for transportation and other uses – capital investment has continued to grow. According to the International Renewable Energy Agency (IRENA), capital investment was greater than US$300 billion in 2018.[2] More recently, Bloomberg New Energy Finance estimated global investment in the 'energy transition' of more than US$500 billion in 2020.[3]

As large as those sums are, the required sums of ultimate capital investment needed to meet global climate targets such as the Paris Agreement is much larger. According to the International Institute for Applied Systems Analysis, meeting a climate change target of 1.5 degrees Celsius could require an annual investment of approximately US$1 trillion in renewable power generation until 2050, along with hundreds of billions more per year in energy transmission, storage and distribution infrastructure.[4]

In a recent report, the International Energy Agency called for annual clean energy investment of over US$4 trillion per year to meet a global net-zero carbon pathway, with a significant fraction of this amount to be spent on renewable electricity generation.[5]

These are of course only estimates based on economic models with a host of input parameters and assumptions. However, despite the rapid drop in renewable energy capacity costs over the past decade, it is clear vast sums will be required to meet Paris Agreement targets, much less the more stringent targets also being discussed.

It is also clear that given the scale of the capital requirements needed over decades, private capital must be harnessed, not only to finance construction but also to supply the advanced technologies needed. Much of this private investment will be cross-border in nature, as funds and technology must flow to the emerging market countries where underlying energy demand growth is often highest.

Given the need for such large amounts of private cross-border investment in complex and long-lived renewable energy infrastructure, effective means of international dispute resolution are critical. Without those mechanisms, private investment will be curtailed, and the developing world will be starved of the funds, technology and expertise needed to transform its energy sectors. It is no exaggeration to say that international arbitration must play a major role in the global environmental future, as without it the needed cross-border investment cannot occur.

In this article, I examine the scope for disputes in the renewable energy sector in the Americas in the coming decades. I focus on the regions outside the United States and Canada, where such investment disputes are typically resolved in the domestic courts or arbitration. I also focus on the renewable power generation sector, primarily utility-scale solar and wind, as these make up the majority of renewable energy investments and disputes in most countries.

Renewable energy in the Americas

Many major economies in the Americas have long relied on hydropower as a primary source of electricity generation; however, in recent years many countries have begun to rely more heavily on 'new' renewable resources, such as PV solar facilities and wind farms, to generate an increasing share of electricity.

Growth in installed capacity has been especially strong in the solar sector, which is primarily PV solar.

A major driver in the very rapid growth in PV solar has been rapidly falling costs, coupled with advantageous solar resources in many countries. Brazil has seen very rapid growth in PV capacity,

with new projects being planned outside the renewable procurement auctions.[6] Mexico has also shown rapid historical growth in solar investment, although, as discussed below, this has slowed recently owing to proposed regulatory and legislative changes.[7] Chile's northern region, which contains the Atacama Desert and perhaps the highest average solar irradiance in the world, has also seen a rush of new projects. [8]

While the recent rate of growth has not been as high in the wind energy sector, installed capacity of wind farms has also continued to grow over the period from 2016 to 2020. Brazil has also been the largest destination for investment in the wind sector.

The capital investment in the Americas' renewables sector is large, and much of it reflects cross-border investment. For example, in 2019 Brazil saw US$6.5 billion being invested in new renewable energy capacity, followed by Chile (US$4.9 billion in 2019), Mexico (US$4.3 billion in 2019) and Argentina (US$2 billion).[9]

Sources of disputes in the renewable power sector

The renewable power sector shares many characteristics with other energy infrastructure sectors, which have long been the source of many international arbitration disputes. Green power projects involve large and long-lived sunk cost investments, which cannot be easily redeployed once built, as is the case with many other types of projects. However, there are other characteristics of these projects that makes them perhaps even more vulnerable to disputes.

Changes in subsidy policies

Historically most solar and wind renewable energy projects were heavily subsidised, directly or indirectly. Given that the energy from those sources was generally quite expensive compared to energy from 'conventional' sources, public support policies were required to support the development of and investment in those projects.

Although those support and subsidy policies made financing possible, changes in the subsidy or policy regime could have a very substantial impact on the financial viability of projects.

Various countries have used a wide variety of policy mechanisms to support green power. In many countries in Europe, a feed-in tariff (FIT) mechanism has often been used. Under a FIT mechanism, a special FIT price (higher than that for conventional electricity generation) is provided to qualifying projects for a substantial period, often 10 or more years. The level and stability of those prices was designed to make the qualifying projects financially viable.

In other countries, such as the United States, direct subsidies have often been employed. For example, the production tax credit in the United States provides a valuable tax credit for every unit of wind power generated, in addition to normal electricity sales under contracts. The investment tax credit, typically used in the United States for solar projects, provides a somewhat similar tax credit based on the investment made in the facility. Those credits, while implemented through the tax system, are effectively direct subsidies paid to generating facility owners.

Another means of supporting renewable energy is to require users (eg, the utilities that generally serve most retail customers) to buy at least a certain percentage of their total power from qualified renewable resources. Under such a renewable portfolio standard (RPS) system, utilities or other purchasers can either buy green power directly from renewable owners or meet their obligations through the purchase of renewable energy certificates from other sellers. Those types of purchase obligation systems have been used in many US states, as well as in Mexico and other Latin American countries.

The most common model used in South and Central America is a reverse auction model for procuring renewables. Effectively, the government or regulatory agency sets an amount of renewable energy to be purchased (often by type of power, such as PV solar), and developers bid to supply the power under a long-term contract (a power purchase agreement (PPA)) with the utility or other (often governmental) off-taker.

This model, which was largely pioneered in South America, and is sometimes referred to as the 'Latin American' model, has been used in more than 50 countries around the world. Brazil, for example, held its first renewables tender in 2005, followed by Uruguay in 2006. Chile, Guatemala, Mexico, Peru, El Salvador, Nicaragua and Jamaica have also relied on these or similar tender mechanisms.[10]

With projects heavily dependent on subsidies for financial viability, there is of course obvious scope for dispute if subsidy policies change. As discussed below, for example, numerous international arbitrations were triggered by changes in Spanish FIT policies, and this has affected other countries as well.

Siting, environmental and land issues

Utility-scale renewable energy projects use a lot of land. A moderately sized solar PV facility may cover well over a square kilometre of land with solar panels, and wind farms can extend over thousands of hectares.

Unsurprisingly, in many countries assembling the land purchases or leases necessary to build projects can be difficult and prone to delays and disputes. Environmental and permitting issues are also fairly common.

In many cases, the project developer will also need to secure the right of way to run a transmission line from the generation project site to the point of interconnection to the grid. This can also be a fraught process in some countries and an additional source of delays.

Changes in interconnection and electricity market rules

Utility-scale wind and solar projects require interconnections to the grid to sell their output. For a large project, this may require building a dedicated transmission line to connect the generation site to a location on the grid, and the installation of transformers and switchgear to inject the power into the grid.

Since grid operators are generally owned by governments or state-owned enterprises, or are regulated by government authorities, projects may be impacted by changes in interconnection rules. In many cases, the generator will be charged fees to pay for transmission upgrades necessary to interconnect the project.

Once connected, the renewable power project will depend on the grid to transmit the electricity generated to the customer. Renewable projects in many countries have enjoyed preferential transmission access and dispatch, and have benefitted from very low marginal production costs.

When the renewable capacity is available (eg, the wind is blowing or the sun is shining) the project should be able to produce and sell energy. However, transmission systems also have various technical limitations on power flows, and in some cases it may be necessary for those flows to be curtailed. Those curtailments can impact project revenues.

As discussed below in respect of recent events in Mexico, changes in transmission and market rules may have a substantial impact on renewable project economics.

Complex financing and contractual structures

Most large solar and wind projects are project financed – that is, financed using non-recourse loans made to a special purpose vehicle (SPV) company that owns and often operates the project.[11] Project financing is widely used around the world for those projects and allows a project sponsor or developer to raise funds based on the economics of the project, without exposing its own balance sheet and assets to lenders in case of default.

Although attractive in many circumstances, project financing is complex and involves numerous counterparties: the sponsor, a project company, an off-taker, engineers, operations and maintenance and engineering, procurement and construction (EPC) contractors, multiple lenders, etc. There will also typically be a range of other parties, including insurers, consultants, lawyers and other advisers

The commercial relationships between the parties are defined in contracts that typically run to thousands of pages. Even a fairly straightforward PPA to sell power from a project may run to several hundred pages.

Although any complex financing raises the scope for disputes, two features may increase the stakes in a project financing.

- Since loans are made to the SPV project company backed by project economics alone – not to a company with its own robust balance sheet – all parts of the project typically have to work to make the project a success. Any contractual or commercial issue that impacts how the project company operates (eg, delays in starting commercial operations from an EPC contract) will reverberate through a project.
- In many cases, substantial leverage is used, and any return to the project sponsor as the final equity owner is contingent on specific constraints on cash flow being met. For this reason, the project sponsor or equity owner may face large losses if a project underperforms.

These characteristics tend to magnify the normal commercial risks that affect most large capital projects and often trigger disputes. For example, a common issue in renewable energy projects is that the PPA may have tight deadlines to reach financial close and start commercial operations. Delays in securing land and right-of-way rights, financing and engineering and commissioning problems can trigger an event of default under the PPA and other project agreements.

As renewable energy projects become more common and replace other energy sources, commercial arbitral disputes are also likely to rise – reflecting the financing, delay and performance issues typical in the infrastructure sector.

Scope for future renewables disputes in Latin America

There have been relatively few internationally arbitrated disputes regarding the renewable power generation sector in Latin America, reflecting perhaps the relatively recent history of the sector. With so little history as a guide, it is useful to examine initially the pattern of investor-state and commercial arbitration cases outside the region as a guide to some of the issues that may arise.

Changes in subsidies

The largest set of renewable energy disputes has been in Spain, which has been the respondent in a significant number of Energy Charter Treaty and other arbitration claims related to changes in its FIT and other subsidy programmes. Italy and the Czech Republic have also been targeted in somewhat similar cases related to FITs and other changes in renewables regulation.[12]

Although changes in renewables subsidies have been the primary driver of arbitrated disputes in Europe, these have been less common in Latin America. The FIT mechanism is not frequently employed, and the reverse auction model, which is close to a Latin American 'standard', is often implemented through PPAs.

The European Union also started large-scale renewable deployment earlier, when solar and wind costs were typically much higher in comparison with conventional sources of electric generation, such as natural gas. Much of the wind and solar capacity added in the Americas has been built in the past five years, when costs have been falling and the consequent level of subsidies much lower. This may have helped to temper some political risks.

Changes in interconnection, dispatch and other market rules

Although Latin America has seen little past arbitration activity directly related to changes in renewable subsidies, the recent experience of Mexico suggests that other changes in energy policy may be just as significant to the renewables sector and may also trigger a host of claims.

In 2013, Mexico launched an ambitious programme to restructure its electricity sector, which has proved to be of great interest to international investors. A constitutional amendment was passed to transform the state-owned Federal Electricity Commission (CFE), historically a vertically integrated utility.[13]

The reforms to the electricity and other energy sectors implemented in the Electric Industry Law and related legislation were wide-ranging, but aspects of the reforms of particular interest to investors in the generation sector included:

- disaggregating CFE into separate transmission network, distribution, retail and generation portfolio companies;
- providing a new regulatory framework under the Energy Regulatory Commission under the Secretariat of Energy;
- establishing an independent system operator – the National Centre for Energy Control – to operate the grid and ensure transmission access and generation commitment and dispatch is non-discriminatory;
- creating energy, ancillary services and capacity markets for the sale of electrical output and services of generators; and
- ending CFE's retail monopoly, at least for the largest customers.

Mexico's energy reform package also included direct support mechanisms for renewable energy. A system of clean energy certificates (CELs) was implemented to require a minimum level of clean energy production and consumption, like an RPS.[14]

By early 2019, significant issues in the Mexican energy reform were emerging. A renewable auction was delayed and then cancelled by the new Mexican government under President López Obrador.[15] The López Obrador government later allowed conventional hydroelectric resources to count in CEL quantities, with a substantial impact on CEL prices.[16]

Additional government proposals have been far-reaching and include altering the dispatch rules to give priority to CFE generation regardless of cost, with wind and solar dispatched later (along with other independent power generation).

There have also been proposals to review self-supply contracts held by industrial and other large customers, review other independent power producer contracts with CFE and eliminate future renewables auctions.[17] Changes in transmission tariffs for self-supply contracts and issues connected with interconnections for new generation projects have also been raised.

Many of the López Obrador government's proposals have currently been halted by injunctions in the Mexican courts. However, it is expected by many that if the López Obrador government measures are enacted, Mexico would likely face investment treaty claims.[18] These could focus not only on changes to the CEL renewable support mechanism but also to the many other market and transmission changes, which could affect the output of renewable energy projects and hence their future revenues. The changes may also impact the value of projects still in development, whose prospects may have been substantially dimmed by the new measures.

Other causes for disputes in the renewable power sector

As previously described, wind, solar and other renewable energy projects are highly complex, and substantial risks exist related to construction and commissioning delays, plant performance and other factors. These are most likely to trigger commercial disputes between project developers and off-takers, such as utilities, but given the complexity of those projects and the regulatory and policy environment, a wide range of investor-state disputes could also arise.

A relatively common issue is delays in getting a facility financed, built and commissioned, which can, in many cases, lead to a default under and off-take contract, which may scupper a project completely or trigger significant damages. Delays, for example, may be behind several claims before the Permanent Court of Arbitration against the Argentine electricity market operator.[19]

Conclusion

The global renewable energy industry, if not in its infancy, is still very much in a growth phase. If global climate targets are to be met, the wind and solar power sectors must expand substantially from their current levels.

The required decades of cross-border investment appear virtually impossible without effective means of dispute resolution. International arbitration – both investor-state and commercial – is likely to be a key tool for transforming the global energy economy.

Disputes in the past have centred on government subsidies and other renewable support mechanisms, as green energy was so much more costly than conventional power production. In many countries, this is no longer the case, and the future of renewable disputes may be more tied to the complex contractual and commercial arrangements inherent in those projects rather than on direct changes in government subsidy policy.

Notes

1 International Energy Agency, 'Renewable Energy Market Update: Outlook for 2020 and 2021' (March 2020).
2 Investment trends data set available from the International Renewable Energy Agency (IRENA).
3 Bloomberg New Energy Finance, 'Energy Transition Investment Trends: Tracking Global Investment in the Low-Carbon Energy Transition' (2021).
4 International Institute for Applied Systems Analysis, 'What Investments are Needed in the Global Energy System in Order to Satisfy the NDC and 2 and 1.5 °C Goals', *IIASA Policy Briefs* (2019).
5 International Energy Agency, 'Net Zero by 2050: A Roadmap for the Global Energy Sector' (May 2021).
6 Emiliano Bellini, '5.5 GW of unsubsidized solar for Brazil', *PV Magazine* (30 January 2020).
7 Cas Biekmann, 'Uncertainty Strains Renewable Energy Development in Mexico', *Mexico Busines News* (22 April 2021).
8 Cecilia Keating, 'Atlas seeks enviro nod for 854MWac PV project in Chile's Atacama Desert', *PV Tech* (19 March 2020).
9 Frankfurt School-UNEP Centre/BNEF, *Global Trends in Renewable Energy Investment 2020*. Available from http://www.fs-unep-centre.org
10 Lisa Viscidi and Ariel Yépez, *Clean Energy Auctions in Latin America, Inter-American Development Bank*, 2019.
11 For a discussion of project financing structures for renewable energy projects, see S Santosh Raikar and Seabron Adamson, *Renewable Energy Finance: Theory and Practice* (London: Academic Press, 2020).
12 Igor V Timofeyev, Joseph R Profaizer and Adam J Weiss, 'Investment Disputes Involving the Renewable Energy Industry under the Energy Charter Treaty', *Global Arbitration Review* (10 November 2020).
13 Peter Nance, 'Mexico's New Energy Model: Initial Results from the Mexican Electricity Reform, 2013-18', working paper published by the Wilson Center Mexico Institute, Washington, DC (May 2018).
14 Semarnat/GIZ, 'Clean Energy Certificates and Emissions Trading in Mexico: Reciprocal Effects and Interactions' (November 2018).
15 Jason Deign, 'Industry Stunned as Mexico Cancels Clean Power Auction', *Greentech Media* (4 February 2019).
16 José Rojo Martín, 'Mexican president stands by clampdown against renewable "privileges"', *PV Tech* (9 January 2020).
17 Rebecca Conan, 'Mexico's AMLO sends power counter-reform bill', *Argus Media* (2 February 2021).
18 Cosmo Sanderson, 'Mexico power bill draws warning of treaty claims', *Global Arbitration Review* (3 February 2021).
19 Cosmo Sanderson, 'Argentine grid manager facing third claim', *Global Arbitration Review* (17 November 2020).

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